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POPULATION AGING AND THE CANADIAN LABOUR FORCE

by

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POPULATION AGING AND THE CANADIAN LABOUR FORCE

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1. Introduction

The challenges faced by Canadian labour markets over the past 25 years have been nothing short of phenomenal. Over this entire period, labour force growth in Canada has been unmatched in any other Western industrialized economy. Table 1A summarizes the labour force average growth rates for O.E.C.D.countries over the period 1961-1984. For the decade 1961-1971, Canada's annual average growth rate of 2.8 per cent was matched by only Australia, with New Zealand the only other country with labour force growth in excess of 2 per cent. Labour force growth in Canada then *increased* over the 1970s to rates in excess of 3 per cent per annum. This was totally unmatched, the closest countries being the United States and, to a lesser extent, Australia. Even though Canadian labour force growth slowed significantly over the 1980s, it still remained above *all* other O.E.C.D.countries.

This period of unmatched, sustained labour force growth in Canada can be attributed to two complementary forces: a substantial baby-boom generation which gradually came of labour force age over the period, and considerable increases in labour force participation rates, especially among females. These historical factors are documented and further discussed in section 2 below, with associated compositional details being examined in the subsequent section.

Not surprisingly, such sustained labour force growth placed upward pressures on unemployment rates in Canada over the period. Yet, as shown in Table 1B, Canada did not experience the highest unemployment rates among O.E.C.D.countries. For example, Canada's average unemployment rate of 9.4 per cent over 1980-1983 was exceeded by Spain, Belgium, the United Kingdom, Denmark, the Netherlands and Ireland. This reflects the fact that employment growth was also significantly lower in these countries. This, in turn, highlights the substantial employment growth generated by the Canadian economy over this entire period, which prevented unemployment rates going even higher.

Can these trends be expected to continue into the future, or does the recent experience of substantially lower labour force growth signal new trends for the Canadian economy? The analysis presented in section 4 of this paper suggests the latter. The baby-boom generation in Canada has now reached the twenties and thirties age groups and, hence, is completely of labour force age. The age cohorts entering over the next decade are much smaller, leading to significantly lower labour force growth over this period. As a consequence, the demographic pressures on unemployment rates will be reversed, but

* The views expressed herein are those of the author and should not be attributed to the Institute or the Review.

new challenges in Canadian labour markets may well arise as a result of the slowing labour force growth and the aging of the labour force. These challenges will centre around developing labour market inflexibilities and reduced promotional prospects as the baby-boom generation "clogs up" in the labour force. The result may well be changing management styles and practices and, perhaps, changing organizational structures as management and labour confronts, or is confronted by, these challenges. These issues are explored in section 5 of the paper. The paper concludes with a summary of the main findings.

2. The Past Decade: An Overview

The past decade of labour force growth in Canada highlights two distinct phases. Data for the late 1970s reflect the end of the era of rapid labour force growth which, as noted above, persisted in Canada throughout the 1960s and 1970s. Over the period 1975-1980, the Canadian labour force grew at an average 3 per cent per annum, two-thirds of which was attributable to source population (15 years and over) growth and the remaining one-third to increases in participation rates (see Table 2).

By the early 1980s labour force growth declined considerably to average 1.8 per cent per annum over 1980-1985. The contribution to this noticeable decline was shared equally between the two components. Source population growth, which had been above 2 per cent for two decades, slowed to 1.4 per cent, due primarily to the much smaller cohorts following the baby-boom generation entering the Canadian labour force. At the same time, participation rate growth slowed from an average 1.0 per cent over 1975-1980 to 0.3 per cent over 1980-1985, reflecting, in large part, the effects of the economic recession experienced by the Canadian economy over the early 1980s.

The recession also contributed to a significant decline in employment growth, resulting in increases in unemployment rates which climbed into double-digit levels over the early 1980s. By 1985 there were over 1.3 million persons unemployed, almost twice as many as a decade earlier. It is interesting to note that, given decreasing labour force growth, Canada could have suffered a decline in employment growth over the early 1980s *without* experiencing an increase in unemployment rates. This hypothetical scenario would have resulted from a decline in employment growth from the average annual 2.9 per cent over 1975-1980 to around 1.8 per cent over 1980-1985 which would have absorbed sufficient new labour force entrants into employment over the period to keep unemployment rates unchanged. As it was, however, employment growth declined even further, to an average 1.1 per cent, thus precipitating the increase in unemployment rates. In this sense, therefore, the recession and not demographic developments caused the rise in unemployment rates in Canada over the 1980s.

3. The Past Decade: Composition

These aggregate trends, however, mask considerable changes in composition of the Canadian labour force over the past decade. Table 3 outlines the age composition of the labour force source population (aged 15 years and over). It documents the effects of the

baby-boom generation on the labour force over the decade. In Canada the baby-boom generation comprises those with birthyears between 1947 and 1966, with a peak at birthyear 1961. Consequently, by 1975 the leading majority of the baby-boom generation had become of labour force age expanding the youth age group (15 to 24 years). Over the late 1970s, the remainder of the baby-boom generation entered the youth age groups and the leading edge resulted in rapid growth in the older age groups. By the early 1980s, however, the majority of these youth had aged into young adults and the youth labour force began to decline. The leading edge of the baby-boom ensured that the most rapid growth took place in the 25 to 44 age groups.

This movement of the baby-boom generation into the labour force age groups over the decade is reflected in the median age of the source population which declined over the 1970s and then started to rise over the 1980s. By 1985 it had reached 38 years. As a postscript to these demographic developments, it is interesting to note the above-average growth in the senior (65+ years) population which is also often taken as an indicator of an aging population. However, since very few of these persons are actually in the Canadian labour force, this indicator is of limited use in the current context.

These demographic developments were clearly reflected in unemployment rates over the decade (see Table 4). The 1970s witnessed a noticeable increase in youth unemployment rates, from 12.0 per cent in 1975 to a peak of 19.9 per cent in 1983. This latter figure clearly reflected the effects of the economic recession in Canada. Aggregate unemployment rates jumped to double-digit levels in 1982 and peaked at 11.9 per cent in 1983. Foot and Li (1986) have argued that youth unemployment rates *relative* to the aggregate unemployment rate started to decline before the onslaught of the economic recession and that, in fact, the youth fared relatively well over the recession even though their unemployment rate climbed to very high levels.

One argument advanced to support this hypothesis is that the youth have a greater propensity to be employed in part-time jobs and that these positions suffered relatively less in the recessionary environment. Labour force survey data show that in 1975 youths occupied 25.6 per cent for all jobs but 46.7 per cent of all part-time jobs. As the baby-boom aged, these figures declined to 24.8 and 44.0 per cent respectively by 1980, and in 1983, at the height of the economic recession, to 21.8 and 42.3 per cent respectively. However, over the decade the share of part-time positions in the economy rose from 10.6 per cent in 1975, to 13.0 per cent in 1980 and 15.5 per cent by 1985. Of the 0.768 million new part-time jobs created over the decade, youths filled 37.5 per cent; that is, although the entry of the baby-boom generation into the Canadian labour force clearly put upward pressures on unemployment rates in the younger age-groups, these rates did not increase as much as the demographic developments alone might have indicated because the youth participated in the part-time "market" where the employment growth was greatest.

These demographic developments were very similar for both males and females over the decade. Yet comparable data for males and females (see Table 2) show that labour force growth for females far exceeded that of males throughout the decade. Moreover, the reason for this differing performance is readily apparent from these data. Whereas both groups experienced very similar source population growth over the period, they developed dramatically different participation rate behaviour, with overall rates for

males actually declining over the period while rates for females continued to rise although at a decreasing rate (see also Table 5). This resulted in labour force growth for females averaging 3.0 per cent over 1980-1985 (down from 4.7 per cent over 1975-1980) far exceeding the 0.9 per cent for males (down from 2.0 per cent over 1980-1985). As a consequence the proportion of females in the Canadian labour force increased from 36.9 per cent in 1975 to 42.6 per cent in 1985 with a corresponding decline in the male share (see Table 6).

Perhaps surprisingly, however, this did *not* result in increased unemployment rates for females. In fact, the data (in Table 2) show that the ratio of female unemployment rates to male unemployment rates have trended downward over the past decade, so much so that by 1985 the unemployment rate for females was *below* the unemployment rate for males thus reversing the position that had been prevalent at the beginning of the decade. Moreover, this trend took place in spite of increasing pressures for pay equality for females which would tend to raise their relative wage and, hence from an economic viewpoint, lower the relative demand for their services.

Many reasons can be posited for this labour market development. Two are considered below, but others are certainly potentially relevant. First, as previously noted, an increasing proportion of Canadian employment is part-time employment. Again labour force survey data show that of the 0.768 million new part-time jobs created over the decade, 75 per cent were filled by females; that is, females also captured an increasing share of the more rapidly growing employment source. While it might be argued that part-time employment is not equivalent to full-time employment, this does nonetheless explain how the rapid explosion of females in the Canadian labour force over the past decade did not lead to a relative increase in the female unemployment rate.

Second, the Canadian labour force is gradually becoming better educated. According to labour force survey data, 32.5 per cent of the labour force had at least some post-secondary education in 1975, while 33.4 per cent of the employed had the same educational attainment thus lending support to the hypothesis that more education improves the chances of employment. On average females were more highly educated with 33.6 per cent of the labour force and 34.5 per cent of employment with some post-secondary education, while the corresponding figures for males were 31.9 and 32.7 per cent respectively. Over the remainder of the 1970s these percentages fell as the remainder of the baby-boom generation entered the labour force. By 1980, 30.4 per cent of the labour force and 31.3 per cent of the employed had some post-secondary education. Then over the 1980s the trend was reversed. By 1985, 35.9 per cent of the labour force and 38.5 per cent of the employed had some post-secondary education. For females, the figures were 38.8 and 40.1 per cent respectively, while for males they were 35.9 and 37.3 per cent respectively. Consequently, over the decade employment has gradually moved towards more highly educated positions and females have been better able to capture these positions. Of the 0.823 million new "higher-education" jobs created over the decade, almost 61 per cent were filled by females; that is, females were better positioned to capitalize on the increasing educational attainment apparently required of new jobs. This also helps to explain why female unemployment rates decreased relative to male rates over the decade.

By 1985 the Canadian labour force totalled 12.639 million persons (see Table 7), of which 7.258 million (or 57.4 per cent) were male and 5.382 million (or 42.6 per cent) were female. A review of labour market developments in Canada over the past decade shows the continuation of some trends but also suggests that some new trends have been established in the 1980s. In particular:

- the baby-boom generation has finally been completely absorbed into the labour force;
- hence source population growth is slowing noticeably for both males and females; and
- the median age of the Canadian labour force is now increasing.
- However, female participation rates have continued to increase while male participation rates have decreased;
- which has led to an increasing share of females in the labour force.
- Unemployment rates have reflected these demographic developments;
- although they have been partially offset for some groups, such as youths and females, by the changing structure of employment such as the greater use of part-time positions.

4. The Future: An Overview

These trends provide the foundation for an assessment of likely future labour market developments in Canada. Of particular interest is which of the past trends can be expected in the future and to what extent are modifications likely. These issues are briefly reviewed in this section of the paper while the following section explores some of the implications of these findings.

A number of authors (e.g.Denton, Feaver and Spencer 1980; Foot 1981, 1983) projected the likely decline in labour force source population growth at least for the remainder of this century. This trend now seems to be well established, with the slowdown in growth over the early 1980s now clearly documented. Further decreases in source population growth have been projected, perhaps to as low as 0.5 per cent per annum over the 1991-2001 period (Foot 1983, 57). Since labour force growth is the sum of source population and participation rate growth, realization of these further declines will be automatically translated into slower labour force growth.

Recent population projections by Statistics Canada (1985, No. 3) provide some indication of the likely order of magnitude.

PROJECTED SOURCE POPULATION GROWTH
(per cent per annum)

	15+	15-64
1985-1990	1.09	0.75
1990-1995	0.95	0.66
1995-2000	0.88	0.69

Source: Statistics Canada (1985, No.3)

These projections show source population (15+ years) growth declining from 1.4 per cent over 1980-1985 to 1.1 per cent over 1985-1990 and under 1 per cent throughout the 1990s. This suggests further declines of approximately 0.5 per cent per annum can be expected. Increasingly in an aging population, these growth rates are influenced by the continued above-average growth of the senior population who are largely unavailable to the labour force. Consequently, examination of growth projections for the 15 to 64 years age group indicates even slower labour force growth and suggests further declines of up to 0.7 per cent per annum; that is, noticeably reduced source population growth of the early 1980s could be further reduced by half over the 1990s. Without any other labour market developments this would reduce labour force growth to around 1 per cent per annum over the 1990s, a dramatic reduction from 3 per cent experienced over the 1960s and 1970s.

These developments can be attributed to the decline in fertility rates over the late 1960s and 1970s resulting in a baby-bust generation which constitute the labour market entrants over the next decade of so. Only towards the end of the 1990s will the children of the baby-boom generation (the baby-boom echo) who are being born in the mid-1980s provide a modest respite to this downward trend. Consequently, it is apparent that even noticeable changes in fertility rates will not affect these projections over the next 15 years.

Similarly, the projections have been shown to be relatively insensitive to quite large changes in immigration levels. For example, Foot (1983, 57) calculates that a sustained reduction in immigration levels by 40,000 persons a year reduces average source population growth by 0.17 per cent per annum over the 1990s. In reverse these calculations suggest that a sustained increase in immigration levels from, say 85,000 persons a year to 125,000 persons a year could increase source population and hence labour force growth by about 0.2 per cent per annum over the 1990s. Changes in the composition of immigration (e.g. towards more labour market entrants) would, of course, affect these calculations but not substantially. At the margin, however, this effect could be important for labour market flexibility (see below).

The inevitable aging of the baby-boom generation will lead to further aging of the Canadian labour force. Historically, the median age of the Canadian population reached its lowest point of 25.5 years in 1966. This was reflected approximately 12 years later in a minimum of 36.5 years in the source population, and a minimum of 33.6 in 1980 in the Canadian labour force. Therefore, the Canadian labour force has been gradually aging since 1980.

This aging process can be expected to continue. Again the Statistics Canada (1985) projections can offer some guide to magnitude.

PROJECTED SOURCE POPULATION AGING
(years)

	15+	15-64
1980	36.5	33.3
1985	37.7	33.8
1990	39.4	35.8
1995	41.2	37.3
2000	43.0	38.9

Source: Statistics Canada (1985).

These calculations suggest that the source population will age on average approximately 5 years over the final 15 years of this century. This is a significant magnitude. To calculate the impact on the labour force it is necessary to take account of the participation rate structure (see Table 5). These calculations, which will largely exclude the influence of the burgeoning senior population, suggest that the median age of the labour force will increase from around 34.5 years in 1985 to around 38.7 years by the year 2000, or an increase of 4.2 years attributable to demographic factors alone. Although slightly lower than the previous result, this calculation still indicates a significant aging of the Canadian labour force in the years ahead.

Although the aging process can be expected to continue, the growth of females in the Canadian labour force is subject to more uncertainty. Continued increases in participation rates will continue to increase the proportion of females in the labour force. However, Foot (1983) has noted that, unlike the past decade, population aging *alone* may place downward pressures on the proportion of females in the future labour force. This arises because of the participation rate structure which, for females, peaks in the 25-34 age group. Movement of the large baby-boom generation into these age groups over the past decade has contributed to an increased labour force proportion, whereas movement out of these age groups in the future will have the opposite effect. Calculations with the Statistics Canada (1985) population projections suggest that, with unchanged participation rates, the proportion of females in the Canadian labour force would decline slightly from 42.6 to 41.9 per cent by the year 2000.

This effect could be easily offset by continued increases in future female participation rates (or decreases in male rates). For example, maintenance of the 1985 share by 2001 would require an average increase in all female participation rates by only 2.9 per cent (not percentage points); that is, the aggregate female participation rate would have to increase from 54.3 per cent to 55.9 per cent – a not unreasonable possibility. But note that such an increase is necessary simply to *maintain* the female share, and that further increases are necessary to maintain the *growth* in the female share of the labour force. Also note that growth in female participation rates is likely to slow as the rate gets closer to 100 per cent. For all of the above reasons, it is likely that the female share of the

labour force will not grow nearly as rapidly over the next decade as it did over the past decade.

The effects of these demographic developments on unemployment rates remains uncertain. As in the past decade, changing patterns of work (part-time) or education requirements (perhaps leading to the bimodal labour force) can have major impacts on unemployment rates for selected labour market groups. Based on similar calculations, Foot and Li (1986) have posited declines in the unemployment rates of youth and increases in the unemployment rates of older workers, particularly young adults (25 to 34 years) as the baby-boom gradually ages through the Canadian labour force. Fragmentary evidence is already emerging on these new trends (see Table 4).

5. The Future: Implications

The Canadian labour force has undergone some dramatic developments over the last decade. The nature of the developments and the associated labour market challenges are now gradually changing. Slowing source population growth and increasing average age are the dominant and most certain features of Canada's future labour force. These have far reaching implications with respect to the successful utilization of this essential national resource.

Over the past decade, the challenges of the labour market have primarily centred on the successful absorption of the massive baby-boom generation into the Canadian labour force without "undue" pressures on unemployment rates. This was largely accomplished by the early 1980s, although the depth and resilience of the economic recession over 1982-1984 kept attention focussed on unemployment rates. Although this problem remains in need of a completely satisfactory resolution, attention must now be focussed on the emerging labour market challenges of the future. These will likely result from slowing source population and hence labour force growth, and the associated aging of the labour force. The challenges facing the future labour market will centre around the developing "inflexibilities" resulting from these developments. The lack of sufficient "new blood" at the young end of the age spectrum, together with the reduced promotional prospects as the baby-boom generation "clogs up" in the labour force will require changing management styles and practices and even, perhaps, changing organizational structures as both management and labour are confronted by these new developments. Some of these issues are briefly explored below but this remains an interdisciplinary area in need of cohesive and consistent research.

First, consider the labour market inflexibilities resulting from the "lack of new blood" in an organization. Traditionally this is used to refer to entry-level positions in an organization which are filled by new, or at least young, labour market participants. These persons are presumed to be the most flexible with respect to location and occupation. They possess up-to-date labour market skills, and do not have a work history tying them to any particular organization or occupation. Moreover, they are not already part of an organization's bureaucracy and hence represent resources which can be deployed in the most efficient manner without disruptive costs to both employer and

employee. At the margin they are by far the most adaptable resource available to an organization and their deployment facilitates growth in an ever-changing marketplace.

In 1980 there were over 3 million youth in the Canadian labour market. They represented 26.4 per cent of the labour force. By 1985 the number of youth had fallen by 200,000 persons and their share had already dropped to 22.6 per cent. These trends will continue over the remainder of the 1980s and 1990s. By the year 2000, if participation rates did not change, their total could well drop another 400,000 persons and represent only approximately 17 per cent of the Canadian labour force. This means that organizations will be faced with the availability of *absolutely* fewer young people from which to recruit for their entry-level positions. While this may initiate a number of appropriate labour market adjustments – their wages may be driven up or older people may seek entry-level positions – it is likely that all such adjustments will involve more inflexibilities than the hiring of a plentiful baby-boomer of the past years.

This will, therefore, focus attention on the redeployment of existing human resources. But this may not be an easy task. Keyfitz (1973) has demonstrated that reduced rates of population growth can negatively affect the prospects for advancement of individual members of the population, and Tepperman (1975) provided a neat illustration using, as an example, data relating to the Officer Corps of the Coldstream Guard. More recently, Denton and Spencer (1982) extended the Keyfitz framework to include labour force participation rates. Drawing on Canadian experience and using computer simulation experiments, they confirmed that promotion prospects are positively related to the rate of population growth and to the age of retirement, and negatively related to population aging and to the age of labour force entrance. They showed that the estimated age which divided the labour force of those aged 20-64 years into equal parts increased by 1.7 years between 1951 and 1966 and then fell by 3.6 years over the subsequent decade. With respect to the future they conclude that "the pattern which emerges is that of an increase from 1981-2011 and a small decline thereafter. The effect is especially pronounced in the decade 1991-2001 when the relevant age increases by 3.2 years . . . as a result of the baby boom generation reaching middle age" (1982, 9). Moreover, they show that their conclusions are insensitive to alternative population projections including variations in immigration levels. Therefore, to the extent that age matters in promotion prospects, the baby-boom generation suffers some disadvantage as a result of its size.

To the extent that promotion prospects are considerably worsened by population aging, there may be increased discontent in the Canadian labour force in the years ahead. This discontent may make redeployment of existing resources more difficult, or it could facilitate such redeployment as employees move in an attempt to seek promotional prospects. Organizations will have to adapt and respond to this new labour market environment.

Driver (1985) provides a useful framework in which to consider appropriate individual and organizational responses. Using a career concept model, he identifies four career concepts and their characteristics.

FOUR CAREER CONCEPTS

Concept	Frequency of Occupation Change	Duration in Occupation	Direction of Job Movement
Steady State	None	Life	None
Linear	Rare	10+ years	Upward
Spiral	Moderate	5-10 years	Lateral
Transitory	Frequent	2-4 years	Lateral

Source: Driver (1985), Table 1

Each concept offers a widely held and subjectively valid view of the meaning of a career. The steady state concept defines a career as a vocation or calling. Early vocational counseling is essential and obsolescence is very threatening. The linear concept is, perhaps, the most familiar. Here success and career requires continued upward movement. The spiral concept is becoming increasingly associated with mid-life crises and is characterized by cycles and major career changes. Finally, the transitory concept represents a consistent pattern of inconsistency.

Driver then goes on to identify organizational structures and reward systems appropriate to each concept.

ORGANIZATIONAL CAREER CULTURE

Concept	Organizational Structure	Reward System
Steady State	Flat pyramid	Tenure, seniority, benefits
Linear	Tall pyramid	Promotion, recognition, power
Spiral	Open matrix	Educational support, leaves
Transitory	Temporary teams	Variety, time off

Source: Driver (1985), Table 9.

Steady state career culture organizations are flat with numerous specialized departments. There is little mobility and rewards focus on security items such as tenure and benefits. Pay would parallel longevity and professional competence, not just managerial level. Training to offset obsolescence would be encouraged. The linear career culture organization would be a tall pyramid with intense upward mobility. The key reward is promotion, although recognition and power are in evidence. There are losers. The spiral career culture organization is more evident outside North America. Vertical hierarchy is kept to a minimum; movement is mainly lateral as projects change. Rewards are based on breadth of competence, rather than current output, and emphasize time off for education in new areas of interest or new types of assignment. Transitory career culture organizations are ephemeral. Employees avoid fixed roles; temporary teams are used. Rewards emphasize variety and flexibility, with tolerance for unusual work habits.

Driver's basic premise is that most employees, managers and organizations define careers as a linear progression in a tall pyramidal structure, and that this concept will experience great difficulty in the years ahead as the baby-boom generation saturates middle management positions. This trend will be intensified by slower economic growth which retards new openings and by the movement towards nonmandatory retirement which can block the routes to upper management. His concern is that society is "headed toward a vast encampment of plateaued, frustrated l...ears who refuse to change" (p. 260). His solution is a change in career concepts with attendant changes in reward systems and organizational structures.

In fact, it might be argued that the very nature of the pyramidal organizational structure is dependent on a pyramidal labour force to support it. The taller the pyramid, the more necessary the pyramidal age structure of the labour force. The flatter the pyramid or the more rectangular the organizational structure, the less necessary the pyramidal age structure of the labour force. Up to 1980 the Canadian labour force displayed a pyramidal age structure thus supporting tall pyramidal organizational structures and the linear career concept. By 1985 the declining base of the pyramid was clearly evident (see Table 7), thus suggesting that over the 1980s and beyond this concept is likely to be under increasing pressure. Organizations that adjust their organizational structures and reward systems to foster spiral, steady state or even transitory career cultures are likely to be more appropriate to the future Canadian labour force.

6. Conclusions

Canada's past labour force growth has been unmatched in any other Western industrialized economy. This was primarily due to the entry of the massive baby boom generation into the labour force over the 1960s and 1970s. However, the 1980s have signalled the emergence of new trends. Significantly lower source population growth and aging now characterize Canada's labour force, and these trends are likely to continue throughout the remainder of this century. Instead of focussing on the successful absorption of the baby-boom generation, focus must shift to the new challenges precipitated by these new trends. These will likely centre around developing labour market inflexibilities and reduced promotional prospects as the baby-boom generation "clogs up" in the labour force. The result may well be changing management styles and practices, and perhaps organizational structures as both employees and employers confront, and are confronted by, these new labour market challenges.

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TABLE 1A
OECD Labour Force Average Growth Rates, 1961-1984
(per cent per annum)

	1961-71	1971-77	1977-82	1982-84
Australia	2.8[a]	2.0	1.5	1.5
Austria	1.2[a]	0.0	1.7	0.9
Belgium	0.7	0.8	0.7	0.4[b]
Canada	2.8	3.3	2.6	1.8
Denmark	1.3[a]	0.9	1.2	1.2[b]
Finland	0.3	1.5	1.2	0.9
France	0.9	1.0	0.7	0.2
Germany	0.2	-0.3	0.7	-0.1
Ireland	0.3	0.8	2.0	1.0[b]
Italy	-0.7	0.9	0.8	1.0
Japan	1.3	0.8	1.2	1.3
Netherlands	1.1	0.4	2.5	1.6[b]
New Zealand	2.2	2.3	1.0	1.7[b]
Norway	1.0	2.3	1.5	0.8
Spain	0.8	0.3	0.2	0.3
Sweden	0.8[a]	0.9	0.9	0.4
Switzerland	1.2	-1.3	0.7	-0.9[b]
United Kingdom	0.0	0.7	0.4	0.6
United States	1.8	2.5	2.1	1.5

Source: OECD *Labour Force Statistics*.
[a] Australia from 1964, Austria from 1968, Denmark from 1960, Sweden from 1962.
[b] 1982-83.

TABLE 1B
OECD Standardized Unemployment Rates, 1956-1984
(period average)

	1956-66 (%)	1967-74 (%)	1975-79 (%)	1980-83 (%)	1984 (%)
Australia	2.2	2.1	5.5	7.2	8.9
Austria	2.4	1.5	1.9	3.0	3.8
Belgium	2.6	2.6	7.0	11.5	14.0
Canada	4.9	5.2	7.5	9.4	11.2
Denmark	2.3	1.3	6.5	9.9	n.a.
Finland	1.6	2.5	5.1	5.4	6.1
France	1.5	2.5	4.9	7.5	9.7
Germany	1.4	1.1	3.5	5.4	8.6
Ireland	5.4	5.6	7.0	9.7	n.a.
Italy	6.5	5.6	6.8	8.6	10.2
Japan	1.7	1.3	2.0	2.3	2.7
Netherlands	1.2	2.2	5.3	9.9	14.0
New Zealand	0.1	0.3	1.0	3.6	n.a.
Norway	2.3	1.7	1.9	2.4	3.0
Spain	2.1	2.7	5.8	14.6	20.1
Sweden	1.7	2.2	1.9	2.8	3.1
Switzerland	0.1	0.0	0.4	0.5	1.2
United Kingdom	2.5	3.4	5.8	10.9	13.2
United States	5.0	4.6	6.9	8.4	7.4

Sources: All except Denmark, Ireland and New Zealand: OECD *Economic Outlook*; Denmark, Ireland and New Zealand; Grubb (1984).

Source: Bean, Layard and Nickell (1986).

TABLE 2
Components of Labour Market Growth, Canada, 1975-1985

	Level[1]			Growth[2] (% p.a.)	
	1975	1980	1985	1975-80	1980-85
BOTH SEXES:					
Source Population	16.323	18.053	19.372	2.0	1.4
Participation Rate (%)	61.1	64.1	65.2	1.0	0.3
Labour Force	9.974	11.573	12.639	3.0	1.8
Employment	9.284	10.708	11.311	2.9	1.1
Unemployment	0.690	0.865	1.328	4.6	9.0
Unemployment Rate (%)	6.9	7.5	10.3	1.7	6.6
MALES:					
Source Population	8.026	8.847	9.468	2.0	1.4
Participation Rate (%)	78.4	78.4	76.7	0.0	-0.4
Labour Force	6.294	6.935	7.258	2.0	0.9
Employment	5.903	6.459	6.508	1.8	0.2
Unemployment	0.391	0.476	0.750	4.0	9.5
Unemployment Rate (%)	6.2	6.9	10.7	2.2	9.2
FEMALES:					
Source Population	8.297	9.206	9.904	2.1	1.5
Participation Rate (%)	44.4	50.4	54.3	2.6	1.5
Labour Force	3.680	4.638	5.382	4.7	3.0
Employment	3.381	4.249	4.804	4.7	2.5
Unemployment	0.299	0.389	0.578	5.4	8.2
Unemployment Rate (%)	8.1	8.4	10.5	0.7	4.6

Notes: 1 All levels in millions of persons unless otherwise indicated.
2 Average annual rate of growth.

Source: Statistics Canada, *The Labour Force*, various issues.

TABLE 3
Labour Force Source Population by Age, Canada, 1975-1985

	Population (millions)			Average Growth (% p.a.)	
	1975	1980	1985	1975-80	1980-85
BOTH SEXES:					
15-24 Years	4.297	4.554	4.244	1.2	-1.4
25-34 Years	3.428	4.027	4.410	3.3	1.8
35-44 Years	2.516	2.819	3.488	2.3	4.4
45-54 Years	2.420	2.454	2.498	0.3	0.4
55-64 Years	1.854	2.085	2.294	2.4	1.9
65+ Years	1.808	2.115	2.437	3.2	2.9
Total	16.323	18.053	19.372	2.0	1.4
Median Age (Years)	36.7	36.6	38.0	-0.1	0.8

Source: Statistics Canada, *The Labour Force*, various issues and calculations by the author.

TABLE 4
Unemployment Rates by Age, Canada, 1975-1985
(per cent)

	Age (Years)						
Year	15-24	25-34	35-44	45-54	55-64	65+	All
1975	12.0	6.1	4.4	4.5	4.3	5.0	6.9
1976	12.7	6.3	4.8	4.2	4.2	2.2	7.1
1977	14.4	7.0	5.4	5.1	5.1	2.0	8.1
1978	14.5	7.4	5.7	5.3	5.4	N.A.	8.3
1979	12.9	6.7	5.0	4.7	4.6	N.A.	7.4
1980	13.2	6.6	5.0	4.9	4.5	N.A.	7.5
1981	13.2	7.0	5.1	4.7	4.4	N.A.	7.5
1982	18.8	10.5	7.9	7.0	6.9	2.5	11.0
1983	19.9	11.8	8.5	7.6	8.1	2.0	11.0
1984	17.0	11.6	8.3	7.8	8.0	1.9	11.3
1985	16.5	10.8	7.8	7.2	8.2	2.0	10.5

Source: Statistics Canada, *The Labour Force*, various issues.

TABLE 5
Labour Force Participation Rates
by Age and Gender, Canada, 1975 and 1985
(per cent)

	Males			Females		
	1975	1985	Change	1975	1985	Change
15-24 Years	68.8	70.1	+1.3	56.8	64.6	+7.8
25-34 Years	95.3	94.0	-1.3	52.9	70.7	+17.8
35-44 Years	96.1	95.4	-0.7	51.6	70.0	+18.4
45-54 Years	92.7	91.2	-1.5	46.1	61.3	+15.2
55-64 Years	79.4	70.2	-9.2	30.8	33.8	+3.0
65+ Years	18.5	12.3	-6.2	5.0	4.2	-0.8
Total	78.4	76.7	-1.7	44.0	54.3	+9.9

Source: Statistics Canada, *The Labour Force*, various issues.

TABLE 6
Labour Force Composition
by Age and Gender, Canada, 1975 and 1985
(per cent)

	1975			1985		
	Males	Females	Total	Males	Females	Total
15-24 Years	14.9	12.2	27.1	11.9	10.7	22.6
25-34 Years	16.3	9.1	25.4	16.2	12.5	28.7
35-44 Years	12.2	6.5	18.6	13.1	9.7	22.8
45-54 Years	11.1	5.7	16.8	9.0	6.0	15.1
55-64 Years	7.1	2.9	10.1	6.1	3.2	9.3
65+ Years	1.5	0.5	2.0	1.0	0.5	1.5
Total	63.1	36.9	100.0	57.4	42.6	100.0

Source: Statistics Canada, *The Labour Force*, various issues.

TABLE 7
Components of Labour Force
by Age and Gender, Canada, 1975-1985

	Labour Force (millions)			Average Growth (% p.a.)	
	1975	1980	1985	1975-80	1980-85
BOTH SEXES:					
15-24 Years	2.701	3.061	2.861	2.5	-1.3
25-34 Years	2.537	3.179	3.626	4.6	2.7
35-44 Years	1.859	2.222	2.885	3.6	5.4
45-54 Years	1.672	1.799	1.904	1.5	1.1
55-64 Years	1.005	1.124	1.176	2.3	0.9
65+ Years	0.199	0.189	0.187	-1.0	-0.2
Total	9.974	11.573	12.639	3.0	1.8
MALES:					
15-24 Years	1.485	1.643	1.507	2.0	-1.7
25-34 Years	1.630	1.908	2.051	3.2	1.5
35-44 Years	1.213	1.355	1.659	2.2	4.1
45-54 Years	1.106	1.136	1.138	0.5	0.0
55-64 Years	0.711	0.757	0.773	1.3	0.4
65+ Years	0.149	0.137	0.129	-1.7	-1.1
Total	6.294	6.935	7.258	2.0	0.9
FEMALES:					
15-24 Years	1.217	1.418	1.355	3.1	-0.9
25-34 Years	0.907	1.271	1.575	7.0	4.4
35-44 Years	0.496	0.867	1.225	6.1	7.2
45-54 Years	0.566	0.664	0.765	3.2	2.9
55-64 Years	0.295	0.367	0.403	4.5	1.9
65+ Years	0.050	0.052	0.058	0.8	2.2
Total	3.680	4.638	5.382	4.7	3.0
Median Age (Years)	**34.0**	**33.6**	**34.5**	**-0.4**	**0.9**

Source: Statistics Canada, *The Labour Force*, various issues.